

Hydrophobicity: From Theory and Simulation, to Experiment

Tuesday June 24 to Saturday June 28

Organizers: Ruhong Zhou, Shekhar Garde, and Dor Ben-Amotz
TSRC Hosts, Nana Naisbitt at 970-708-0004 and Rory Sullivan at 970-708-4542
Telluride Intermediate School at 725 W. Colorado Ave, Telluride, CO 81435

Tu morning 8:30 - 9 Breakfast at TSRC

Tu morning 9-12 (3 talks)

Jeetain Mittal "Role of hydrophobic hydration in biomolecular assembly"

Dmitry Matyushov "Dynamics of the Hydration Shells of Proteins"

Seung Kang "Surface-assisted assembly of amyloid-like peptides: Influence of surface hydrophobicity, salt concentration, and water humidity"

Tu afternoon 2-5 (3 talks)

Francesco Stellacci "nanostructure in solid-liquid interfaces"

Joel Eaves "The hydrophobic effect at electrically doped graphene and applications to reverse osmosis."

Alenka Luzar "design of new hydrophobic materials & dynamics transitions of water on superhydrophobic surfaces"

Tu evening 7-9 (2 talks)

Akihiro Morita "Structure and solvation at aqueous interfaces"

William Ducker "The Forces between Hydrophobic Surfaces in Water"

Wed morning 9-12 **FREE TIME**

Wed afternoon 2-5 (3 talks)

Huib Bakker "Why ducks don't need a towel: water dynamics at hydrophobic interfaces"

Damien Laage "theoretical study of hydrophobic hydration"

Ken Koga "Osmotic second virial coefficient of methane in water" and/or "Hydrophobicity at liquid-vapor interfaces"

Wed evening 6-9 **Picnic at the Ah Haa School** (300 S. Townsend, Telluride)

Th morning 8:30 - 9 Breakfast at TSRC

Th morning 9-12 (3 talks)

Sylvie Roke “charge /oh- and stern/double layer formation @ hydrophobic water interface”

Mikko Karttunen “Ab initio simulations of hydrophobic hydration in the presence of TMU”

Lawrence Pratt “TBA”

Th afternoon **FREE TIME**

Th evening 7-9 (2 talks)

Monte Pettitt “TBA”

Dor Ben-Amotz “Hydrophobic aggregation comparison of experiments, simulations, and theory”

F morning 8:30 - 9 Breakfast at TSRC

F morning 9-12 (3 talks)

Adam Willard “the influence of chemical heterogeneities on hydrophobic interfaces”

Amish Patel "Water in Hydrophobic Confinement"

Blake Rankin “Finite Lattice and Mean Field Models for Hydrophobic Aggregation Equilibria”

F afternoon 2-5 (3 talks)

Sapna Sarupria “TBA”

Gren Patey “Association and Microheterogeneity in Aqueous Solutions of Small Amphiphilic molecules”

Shekhar Garde “Hydrophobic interfaces; charges, oh- and water”

Saturday **FREE TIME**